

question box. . .

If you have questions on company policy, write the Editor, **Nuclear Division News** (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

Parking violations

QUESTION: Why are some allowed to park in yellow areas at Bear Creek Portal at Y-12, while others are given tickets for parking in the same places?

ANSWER: No one is allowed to park in restricted zones. Unfortunately, many problems continue in parking lots because of disrespect by a few for the regulations and rights of others. Parking lot patrols are only periodic; but when patrols are conducted, notices (tickets) are issued on a consistent basis.

Parking lot markings for traffic flow and restricted areas are the result of considerable study in the interest of personal safety, traffic flow, and pedestrian access, as well as emergency and commercial vehicle access to and from plant areas. We agree that it is disturbing when inconsiderate persons handicap us all to avoid a few extra footsteps.

Biology's smoke emissions

QUESTION: I am concerned about the smoke emitted from the incinerator at the Biology Division complex several times a week. I understand that dead experimental animals are burned there, so we not only are subjected to the very unpleasant smell at the east end of the Y-12 Plant, but also must breathe possibly harmful materials previously used in connection with the animal experiments (carcinogenic chemicals, etc.). Can you assure me that everything is being done to filter this smoke properly to protect employees from this exposure? Cannot additional measures be taken to eliminate the smell of the incineration?

ANSWER: The visible emissions and unpleasant odor at the east end of the Y-12 Plant are not the result of the Biology Division's incinerator; it has not been operated since 1969. All test animals in the Biology Division complex are disposed of offsite. The most likely source of the visible emissions is steam from the Biology Division autoclaves. The source of the odor is apparently from several animal facilities located in the Biology Division buildings, which contain approximately 350,000 animals, primarily mice. The odor, which does not constitute a health hazard, is occasionally present during the temperature inversions that are common in the Y-12 valley during early morning hours. Animal cages are cleaned and bedding is changed frequently to minimize odor problems; however, total elimination of the odor problem is not possible without exorbitant expense.

(Please turn to page 7)

In this issue. . .



Andy Inman, Plant Records, is seen developing micrographic film, as the Nuclear Division attempts to cut down on its paper volume. Micrographics Department, making mole hills out of mountains, is described on page 5.

Lewises construct own 'mountaineer' home

East Tennesseans thought nothing of building their own homes a hundred years ago. Rick Lewis, an instrument mechanic in ORGDP's Fabrication and Maintenance Division, has turned back the clock to match the frontiersman's fortitude. With his wife, Carol, her son, Guy, and their two teen-aged daughters, Rosie and Ginger, Lewis occupies a neat cottage near Philadelphia.

"It's a place most people would pick for a vacation—so we don't go anywhere. We're already there," Lewis says.

Carol, a native of Florida, fell for the Tennessee hills the moment she saw them, and Rick, who is from Knoxville, needed no coaxing to settle here. "We came to this area in 1978, looking for work. I went back, packed and told Rick we were ready to move," Carol explained. "Rick said we would give our two weeks' notice, even if he had to pump gas in this area. Ironically, Union Carbide called and offered Rick a job. So, our lot was cast."

While living in a rented home in Kingston, the couple found 20 acres in the southeastern end of Roane County. The design for their cabin came mostly from *Mother Earth News* and the *Foxfire* books. Neither of the Lewises knew much about house building.

Actually, the house is not a typical log cabin, in which the logs are run alongside the walls of the house. The style they used is called a "cordwood" house, where the logs are cut shorter and are placed facing into the house, allowing a lot of room between the outer and inner walls. "They make for better insulation," Rick says. As a matter of fact, it took 142 hand-mixed batches of mortar to fill the gaps.

"Our neighbors never said much, but they must have thought we were crazy," Rick says. Carol takes another view, however. "Actually, they were very encouraging," she says, "They brought food and water when our own supply ran dry."

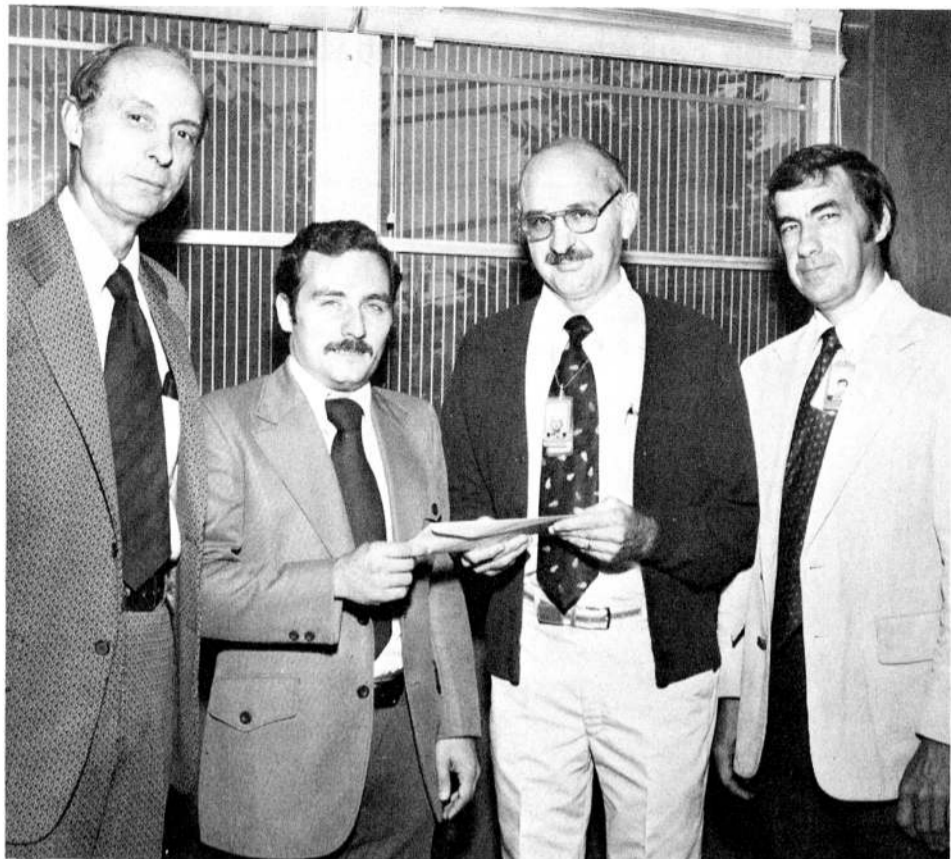
After eight months (two just to cut the timber), the Lewises were ready to move into their do-it-yourself home. They swapped their fast-paced lives in Ft. Lauderdale for the peace and quiet of country living. "Rick's idea of a good time is to sit on the front porch and smoke a pipe," Carol states.

Before electricity was installed a couple of months ago, the Lewis family really roughed it. An icebox kept the food cold, and books were read by kerosene lamps. In cold weather, food was stored outdoors. There was a battery-powered television, but no indoor plumbing.

(Please turn to page 8)



The Lewises' 'dream house,' in southeastern Roane County
Photos: Courtesy of Carol Batey, Roane County News



EDUCATIONAL REFUND—Richard R. Burleson, Y-12 Development Division, received his final 50 percent payment under the Educational Assistance Program when he was awarded a master's degree in electrical engineering from the University of Tennessee. Half of the costs of an advanced degree are borne by Union Carbide while schooling is in progress, and the other half is reimbursed upon completion of the degree. From left are William H. Dodson, Burleson, Coleman C. Wright and Fred W. Jones.

Paducah crew marks safe year

The Paducah Plant's H-1 shift cell change crew members recently completed one year (July 1978-July 1979) without an injury of any kind. During the year, the men made 50 cell changes and some 100 block valve and B-line expansion joint changes.

The responsibilities of this 14-man crew and others like it are at the heart of the plant's CIP/CUP program. In a series of steps, these crews strip a diffusion cell of its component parts and prepare it for the installation of updated and improved equipment.

The cell change work is done in each of the plant's four process

buildings and on every shift. Briefly, the crew's responsibility is to cut, remove, replace and weld process gas equipment.

The crew has proved itself to be safety conscious. According to Mark Emery, crew supervisor, each man is cross-trained in every skill so that he is capable of assuming any job at any time in the cell change crew. In addition, crew members are reminded of job safety aspects at daily assignment meetings. More time is usually devoted to new or different jobs with which the crew may be unfamiliar.



CELL CHANGE SAFETY—The Paducah plant's H-1 shift cell change crew has worked one full year without an injury of any kind. In the back row, from left, are W. J. Ellington, D. R. Sauvage, J. R. Smith, M. A. Cissell, S. W. Haynes and K. R. Stewart; middle row, from left, P. W. Clark, H. E. Massa, D. R. Beard, W. E. Campbell and R. M. Emery, supervisor; and front row, from left, D. L. Yates, G. R. Jones, S. G. Mosley and D. C. Stafford.

wanted. . .



Y-12 PLANT

RIDE in car pool or van pool from Watt Road, Dixie Lee Junction area to North Portal, straight day. W. P. Hunley, plant phone 4-3200, home phone Lenoir City 966-5592.

VAN POOL RIDE from Cedar Lane, Woodgate Apartments, to North Portal, straight day. Jennie Hammond, plant phone 4-0378, home phone Knoxville 688-7995.

RIDE from Palisades, West Town Gardens, Gleason Road, to Central or North Portal, straight day. Plant phone 4-0111, home phone Knoxville 693-6493.

RIDERS from Whittle Springs area, Knoxville, to any portal, straight days. I. C. Hickman, plant phone 4-2687.

RIDE from Swan Pond area, Harriman, or will meet someone in Kingston, to Central Portal, 7:30 a.m. - 4 p.m. Sherry Smith, plant phone 4-2294, home phone Harriman 882-6508.

RIDER, or will form CAR POOL from Walker Springs Road, Knoxville, to North Portal, 7:30-4 p.m. shift. Jerry Whittaker, plant phone 4-0886, home phone Knoxville 693-4718.

RIDE or will form car pool from East Knoxville to Central Portal, 4:30-12:30 shift. E. K. Wilson, home phone, Knoxville 523-6900.

ORGDP

RIDER from Campbell Station Road, Concord, to Portal 2 or Building K-1007. 7:45-4:15 shift. Fred Gupta, plant phone 6-0180, home phone Knoxville 966-0870.

RIDE from East Village area, Oak Ridge, to Portal 4, straight day. E. Stephens, home phone 483-0868, after 5 p.m.

RIDERS from Karnes area, to Portals 5 or 6, 8-4:30 shift. Alvin Hilton, plant phone 4-8985, home phone Knoxville 690-1178.

TWO CAR POOL members from Farragut/Concord area, to Portal 2, straight day. Sandy Tronolone, plant phone 4-9412.

RIDE from Ball Road (Knox County) to Portal 5, D shift. Jack McKinney, plant phone 4-1301, home phone 690-1888.

ORNL

RIDER for car pool from West Outer Drive/Morningside Drive area, Oak Ridge, to West Portal, 8:15-4:45. Dick Roop, plant phone 4-7305, home phone 435-1226.

VAN POOL RIDERS from Norris Freeway/Clinton area to East or West Portal, 8-4:30. H. D. Smith, plant phone 4-4134, home phone 992-0331.

VAN POOL RIDER from West Knoxville to East, South or West Portal, 8-4:30. Dean Treadway, plant phone 4-6580, home phone 584-4879.

JOIN CAR POOL from UT area, Knoxville, to East or South Portal, 8-4:30. Susan Rawlston, plant phone 4-5732, home phone 523-7453, or Vanessa Ostrum, plant phone 6-7908, home phone 573-7460.

RIDE from Inskip area to East Portal, 8-4:30 shift. Mary Ruth McGinnis, plant phone 4-4699, home phone Knoxville 688-8524.

JOIN or FORM CAR POOL from Clinton to West or North Portal, 8-4:30. John G. Smith, plant phone 4-4718, home phone 457-5847.

JOIN CAR POOL from Karns area to any portal, 8-4:30. Bob Ross, plant phone 4-7797, home phone 693-2368.

CAR POOL OR CAR POOL MEMBERS from Lovell View area, East or South Portal. J. T. Holdeman, plant phone 4-5443, home phone 966-6478.

VAN POOL MEMBER from West Knoxville, Crestwood Hills, Brandon Park apartments, West Bridge apartments, Sans Souci apartments, Cedar Springs Shopping Center, to any portal, 8-4:30. Mike Caldwell, plant phone 4-4885, home phone Knoxville 691-4194.

Safety Scoreboard

Time worked without a lost-time accident through November 9

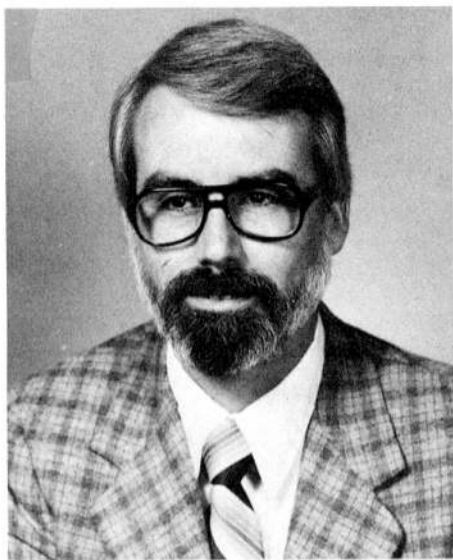
Y-12 Plant.....	217 Days	7,045,000 Employee-Hours
ORGDP.....	331 Days	10,584,196 Employee-Hours
ORNL.....	15 Days	368,984 Employee-Hours
Paducah.....	168 Days	1,781,000 Employee-Hours

New procedure told for reimbursement

A new procedure for reimbursement of educational assistance will become effective December 1 at the three Oak Ridge installations. The new procedure will result in a reduction of manual effort and will provide more accurate reporting data. It will also standardize the reimbursement procedure at all Oak Ridge installations.

Approved applications, along with original receipts and evidence of satisfactory completion, will be processed through each educational assistance office, then through the installation cashier to Accounts Payable. Employees should receive their checks at their home addresses in approximately two weeks.

Wood named to ORGDP post



Houston G. Wood III

Houston G. Wood III has been named head of the Centrifuge Physics Department of ORGDP's Separation Systems Division.

Before joining Union Carbide in 1967, he was a research engineer working on the theoretical analysis of the gas centrifuge at the University of Virginia. He holds a PhD in applied mathematics from that school, and a BA and MS from Mississippi State University. He is a native of Tupelo, Miss.

Wood and his wife, the former Gay Maier, live at 140 Newport Drive, Oak Ridge. They have two daughters, Andrea and Heather.

Appleton, Moon appointed section heads at ORNL

Bill R. Appleton and Ralph M. Moon have been named section heads in ORNL's Solid State Division.

Appleton, who will serve as head of a newly established particles-solids interactions section, will be responsible for programs utilizing ion beams from accelerators to study both bulk and surface properties of solids.

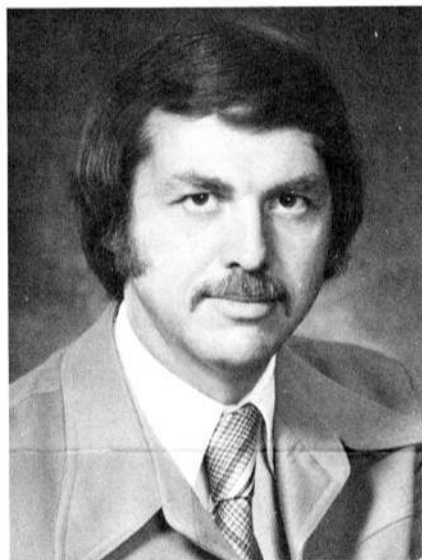
After receiving the PhD in physics from Rutgers University and working for a year at Bell Laboratories, Appleton joined the ORNL staff in 1967 and initiated ion-solid interactions research in the Solid State Division. He recently was elected a Fellow of the American Physical Society.

Appleton and his wife, Priscilla, live at 1025 West Outer Drive in Oak Ridge. They have three sons.

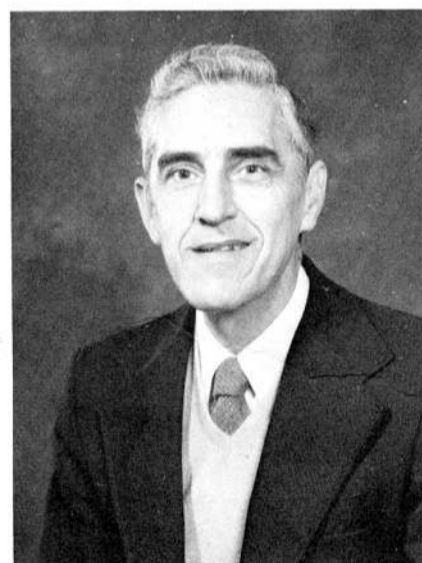
Moon will head the crystal physics section, with responsibility for several Solid State Division research programs in neutron scattering and for research in superconductivity. He also coordinates activities of the neutron scattering research program of Ames Laboratory, which recently was moved to ORNL, and those of the National Center for Small-Angle Scattering Research.

Moon joined ORNL in 1963 after receiving the PhD in physics from the Massachusetts Institute of Technology. He is a Fellow of the American Physical Society.

Moon and his wife, Barbara, live at 865 West Outer Drive, Oak Ridge. They have four children.



Bill R. Appleton



Ralph M. Moon



SAFETY HONORS—Burland Murphy, center, and Ed Krinard, right, receive the Instrument Maintenance Department's award for working 20 years—3.17 million man-hours—without a disabling injury. William Taylor, manager of Paducah Plant Engineering, left, makes the award.

Paducah department sets record in safe operations

Members of the Paducah Plant's Instrument Maintenance Department were recently honored for their 20-year safety milestone. The celebration marked an accomplishment that began September 16, 1959, and has gone 3.17 million man-hours without a disabling injury.

The department is made up of two primary work forces—a field group and a shop group. The 120 employees maintain the plant's electronic and pneumatic instrumentation.

Elvin Kuehn, department head, hired several members of the present work group in 1951 before the plant established offices at its present site.

According to Kuehn, much of the plant's instrumentation has remained basically unchanged. "The implementation of transistors has made a definite impact on electronic instruments; however, the pneumatic system has changed very little," he said.

The electrical aspect of the department's work holds the greatest potential for serious injury, although falls seem to be the more prominent occurrence. "Supervision cannot guarantee the safety of each employee," Kuehn explained. "Each man must also defend himself and his fellow worker. No one is handling those tools but the worker himself."

Instrument mechanics Ed Krinard and Burland Murphy were two of the first crew members hired into the department.

Murphy and Krinard accepted the commendation on behalf of their fellow workers from William C. Taylor, one of the department's original foremen, now manager of Plant Engineering.

"It hurts to get hurt," Krinard said, recalling a back injury he sustained over 20 years ago. "This is an accomplishment we can all be proud of. It's so easy to get hurt—it's worth the effort to stay conscious of safety."



HONOR BANQUET—Members of the Instrument Maintenance Department at Paducah attended a banquet provided in honor of their outstanding safety accomplishment.

NUCLEAR DIVISION NEWS

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NUCLEAR DIVISION

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PADUCAH

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The "healthy worker effect"

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," **NUCLEAR DIVISION NEWS**, Building 9704-2, Stop 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)

Epidemiologists study the differences in disease distribution among population groups to better understand the various factors that influence the incidence of a disease (the occurrence of new cases) or its prevalence (the number of cases existing at any given time). Because it is considered unethical to conduct experiments on humans, epidemiologists generally must resort to comparisons among different "natural" populations.

Ideally, occupational epidemiology studies would compare the incidence of a disease in a population exposed to one specific factor with an identical population that had never been exposed to that factor. In this manner, it might be possible to identify the relationship between the factor and the occurrence of a disease. Unfortunately, it is almost impossible to find two large groups of humans who are identical except for one factor. Therefore, many compromises in study design are frequently necessary.

Healthier in industry

Industrial epidemiology studies often compare the health experience of employed populations with the health experience of the general, or total population. However, such a comparison may be inaccurate. Studies of the death rates of persons employed in industry consistently show that they have a better health experience than those in the general population. This has been labeled the "healthy worker effect." For example, the average death rate for male hourly workers in a large communications industry was found to be only 65 percent as high as the death rate in the United States total male population. There was an even greater difference at age 40 than at age 65. The death rate was 53 percent at age 40 and 67 percent at age 64.

There are many reasons why employed populations are healthier than the general population. A strong selection process screens out the unhealthy in any work force. Pre-employment physical examinations tend to exclude people with major health problems or, at least, to admit only those who can perform certain jobs safely and adequately.

Weeding-out process

A constant weeding-out process occurs during the early years of employment. If a worker finds a job too stressful, or if he develops

symptoms such as chronic fatigue or vague aches and pains, he may voluntarily drop out. He often leaves a demanding job in a big industry for a less demanding job in a small service industry. He will probably never be included in a health study in the newer job, while in the former one he might become a member of a large study. Some "drop-outs" never get steady employment again.

Many people never work, including those with congenital defects, chronic diseases, mental deficiencies or major lifestyle problems, such as alcoholism and drug abuse. Employed populations may also differ from chronically unemployed populations in age, education, race, health care, diet, standard of living, lifestyles and many other ways that affect health experience.

As a result, death rates for unemployed populations have been found to be much higher than rates for those who work steadily. The mortality rates of all U.S. males or females necessarily include the unemployed, the unemployable and those with a low standard of living. Therefore, overall national experience is biased with a higher death rate.

Because epidemiology studies often must use the general U.S. population as a comparison group, some critics have recommended the use of a correction factor when comparing health experience in industry (the observed rate) with the total national experience (the expected rate). Statisticians, however, object to using vague correction factors to apply to overall mortality rates or even to specific U.S. death rates.

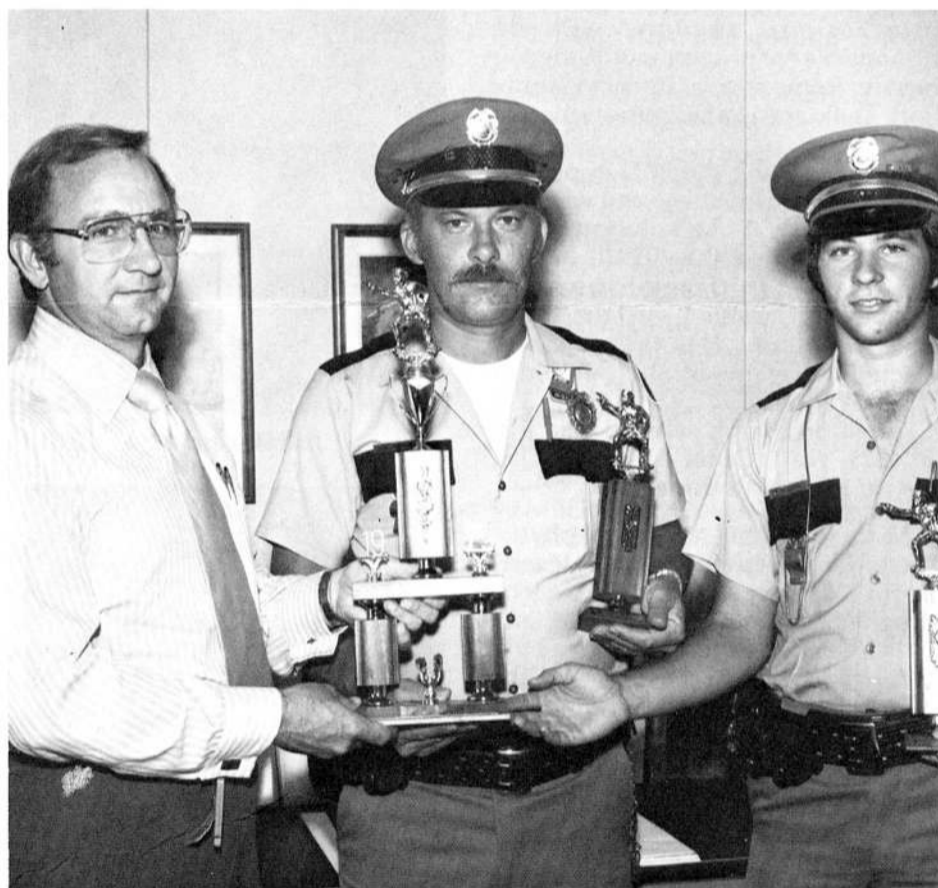
Read with caution

It should not be surprising to find that the "healthy worker effect" influences the death rate from some diseases more than from others. The effect on deaths from cardiovascular disease is much greater than from cancer. Dr. Philip Enterline, Professor of Biostatistics at the University of Pittsburgh, believes that selective factors are not nearly as important for cancer as for cardiovascular, kidney and respiratory diseases.

If the above is confusing, you can understand why two epidemiologists can sometimes examine the same data and reach quite different conclusions. This also suggests that,



NSA VISIT—Nancy DeMars (second from left), the National Secretaries Association's international president-elect, visited Paducah recently to honor newly certified secretaries, including Paducah's Phyllis Elliott (far right). Also pictured are Betty Lester (left), Kentucky Division Corresponding Secretary, and Mary Ellen Pfost, Southeast District Trustee for the NSA Home Trust Fund and the first elected international official from Kentucky.



FIRST OF MANY?—J. D. Bowman (center) and S. W. Smith (right) recently presented Paducah Fire and Guard Supervisor J. R. Wright with the second place two-man team trophy they earned at the Hopkinsville Police Department's 4th Annual Invitational Tournament. Two other members of the plant's Carbide Blue Pistol Team, T. D. Norment and J. Smith Jr., also participated in the competition. "Considering the ability and enthusiasm of the entire team, we expect this to be only the first of many trophies to be included in the department trophy case," said Wright.

when readers pick up their newspapers and read of "startling new evidence of cancer for people working with compound X," they should accept the story with great caution. In most cases, the news story represents a preliminary report. A warning flag has been raised and detailed studies must follow.

Meticulous studies needed

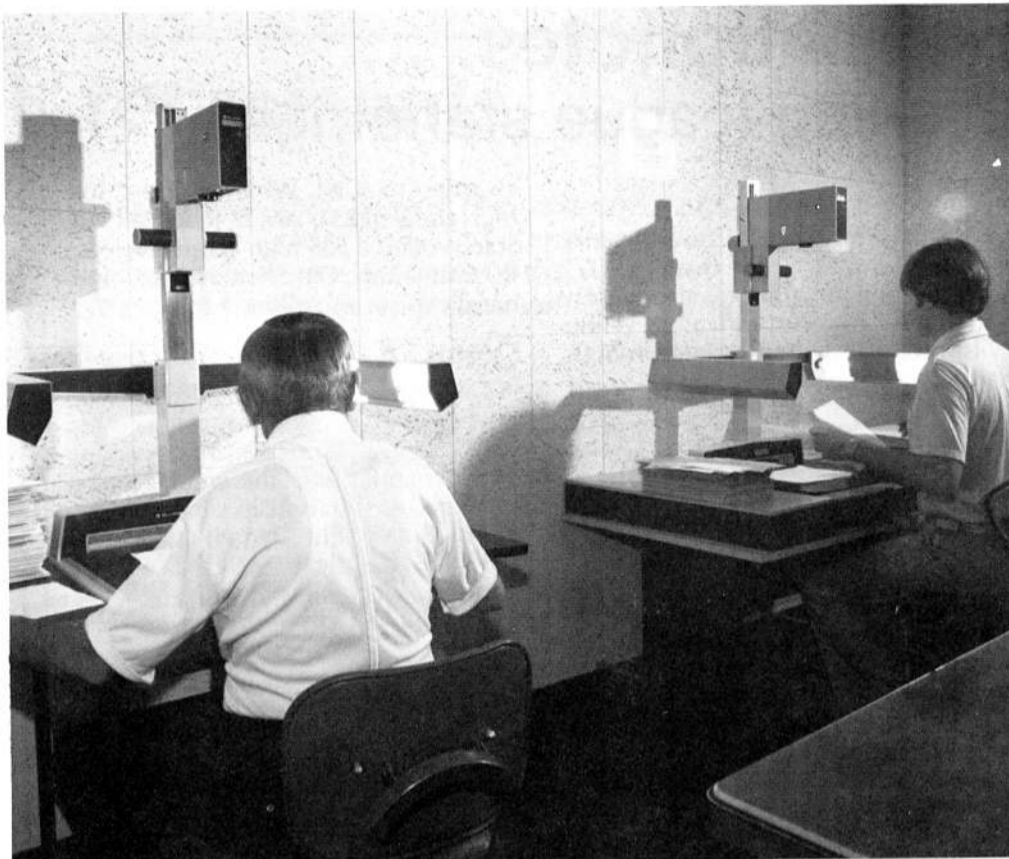
Before a clear association between exposure to a substance and an increased risk of cancer can be made, meticulous studies must be performed. These studies may take several years to complete and must be examined in great detail by many

competent experts before a consensus can be reached.

If basic data on age, sex, smoking habits, type and amount of principal occupational exposures and, perhaps, several other variables could be collected on a large number of people working for several large companies, an adequate comparison population could be identified. This would enable much better studies to be developed than are now possible. The "healthy worker effect" is only one of many problems with which epidemiologists have to contend, but having an adequate comparison population would make their work much simpler.



Maurine Wiley microfilms "hard-copy" records



Medical and personnel records filmed

Drowning in words? Try micrographics!

Do you think sometimes that you are drowning in a "sea of words," or that the avalanche of paper is about to bury you? Well, there is something that can be done about it.

Records management, through the use of micrographics, now has the capability of reducing the contents of a file cabinet drawer down to a volume that can be held in the palm of the hand.

The volume of records in the Nuclear Division facilities continues to be one of the most serious problems we face, but micrographics is providing the solution to controlling the size and management of several major Division record filing systems. Central Micrographics, located in Y-12 Plant Records, serves the three Oak Ridge installations.

There are numerous advantages to using various microforms for the records and

individual programs. First are the obvious ones of space conservation and ready retrieval. Another advantage is file security. Once on film, individual documents are seldom lost or misfiled. Micrographics retains back-up copies of all microfilmed data.

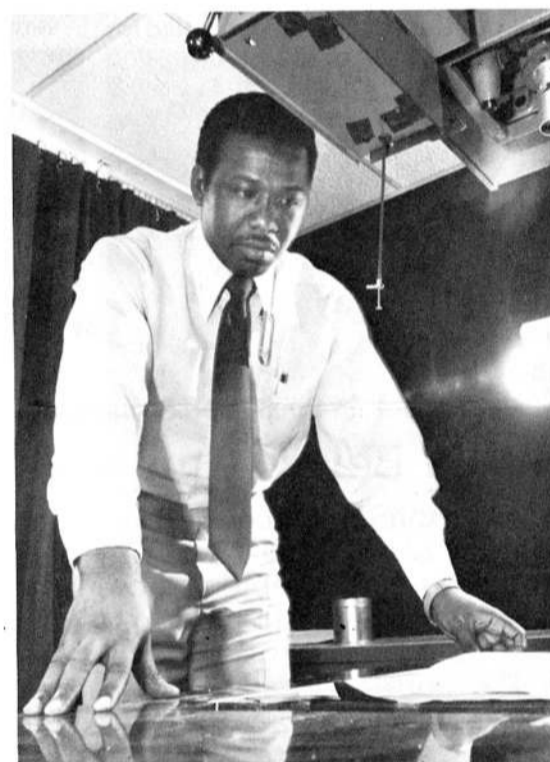
Microfiche has the added advantage of being very small—only four by six inches—and can be stored easily in a small desk file drawer. Film cartridges provide large-volume storage—2,400 pages—and electronically assisted retrieval.

Micrographics work is performed on a scheduled basis. Cost benefit studies are made on each job to evaluate the advantages of converting hard copy to microforms. If you would like an evaluation of your needs for this service, just get in touch with your micrographics representative:

ORNL: Nancy Taylor, 4-6767

Y-12: Will Minter, 4-0082

ORGDP: Bob Harris, 4-8195



Will Minter demonstrates
105 mm camera



Leon Lawson microfilms continuous computer print-out



Laverta Hardin shows microfiche and cartridge forms

recreationotes. . .

Bowling league standings

Y-12 C. . .

The Big Five lead by three points over the Mini-Strikes in the Y-12 "C" League. John Bryan holds the season high handicap series with a 738. Willie Wilson currently has the season high handicap game of 275.

Y-12 Classic. . .

The Ridgers have a three-point lead over the Splinters this week in the Classic League. The Has Beens rolled the weekly high team game of 1090. The Eightballs won high team series rolling a 3019. L. E. Sikes, Cubs, took high game of 272. Don McCarthy, Gutterbusters, went into third position for season high handicap series rolling a 702.

UCC Mixed. . .

There is a very close race in the UCC Mixed League this week. Go-Getters lead by only one-half point. Alley Cats and Safe Guards are tied for second and third positions. Lori Fenstermaker won all the weekly prizes for the women, rolling a 216/519. Bill Jago and Larry Fenstermaker tied for high series with a 525. Larry rolled a 198 for high weekly game.

K-25 Tuesday. . .

The Shifters are currently leading the Tuesday Men's League over the Fearless 5. Weekly prizes were

awarded to B. M. White, Shifters, for high game of 232/269. D. R. Kessel, All Stars, rolled a 565 high scratch series. R. V. Rinehart, City Slickers, won high handicap series rolling a 653.

ORNL A. . .

The ORNL "A" League is led by the Zots. The Dynamics control second, with the Ten Pins in third position. The Dynamics won the weekly prize for high team handicap series rolling a 3086. Boatwright, Dynamics, rolled a 706 high handicap series. Williams, Turkeys, won high handicap game with a 268. Gnadt, of the Limits, took high scratch game rolling a 228.

ORNL C. . .

The Alley Rads lead over the Pin Heads in the ORNL "C" League. The Hit Men are only one-half game behind the Pin Heads. The Remkeys rolled a 3010 to win the weekly high handicap series. Carlos Brooks, Alley Rads, rolled a 700 high handicap series. Cox, Timberwolves, had a 253 weekly high handicap game.

UCC Monday. . .

The Good Luck Four have managed to climb back up on top to lead the league with a one-point advantage over Free Spirit and Strike Force. Individual honors go to Norman Teasley for his 207-205-204/616 performance to capture high scratch series for men. High scratch game for men was taken over by John Green with a 244.

Mixed Bowling tournament set

The Annual Carbide Mixed Bowling tournament is set for January 12, 13, 19, 20, 26 and 27 at the Tri County Lanes. Entry forms and rules are available at those lanes and also at Ark Lanes. Any league secretary will be able to supply forms also.

Deadline for entry is Monday, December 10.

The tournament will be using an 80 percent handicap for the first time, and a new mixed team event has been added. The cost for entry is \$4 per event, \$1 for All Events.

Additional information or entry forms may be obtained by calling the Recreation Office, extension 4-1597.

APPLICATION FOR TICKETS

Requests MUST Be In By November 17

PADUCAH CARBIDE CHILDREN'S CHRISTMAS PARTY

(For Children Ages 2-9)

SATURDAY, DECEMBER 8, 9 A.M.

(Doors will open at 8:30 a.m.)

ARCADE THEATRE, PADUCAH, KY.



Employee's Name _____ Badge No. _____

Home Address _____

(Please Print Street Address or RFD, City and Zip Code)

Number of your children who will attend the party (please list):

Name _____ (BOYS) Age _____ Name _____ (GIRLS) Age _____

Name _____ Age _____ Name _____ Age _____

Name _____ Age _____ Name _____ Age _____

NOTE: Fill out form completely and return as soon as possible, but not later than Nov. 17 to the Recreation Office, Union Carbide Corporation, P.O. Box 1410, Paducah, Ky. 42001. Tickets will be mailed to parents at their home addresses.



Application for Tickets

to



Christmas Parties

FOR CHILDREN OF OAK RIDGE UNION CARBIDE EMPLOYEES
(AGES 2-10 ONLY)

SATURDAY, DECEMBER 22

Plant _____

Employee's Name _____

Home Address _____

City _____ Zip _____

Plant Address _____ Mail Stop _____

Number of Tickets (Children) _____

Number of Tickets (Adults) _____

—CHECK TIME PREFERRED—

Saturday, December 22
Only

9 A.M. _____ 11 A.M. _____ 1 P.M. _____ 3 P.M. _____

Please mark first and second choice (write in space "1" or "2") as only a limited number of tickets will be issued for each party. Preference will be given to early applicants and if tickets for first choice are exhausted, tickets for second choice will be issued.

Return this form, properly and completely filled out, to the Carbide Recreation Office, Building 9711-5, Mail Stop 1, Y-12 Plant. Please apply for tickets before December 14.

Christmas parties set for children

The date is set for the Oak Ridge Union Carbides employees' children's parties. They will be held in the Oak Ridge High School auditorium Saturday, December 22, at 9 and 11 a.m., 1 and 3 p.m.

This year's act will include Inge Williams and her canine stars, featuring Silky, the only Samoyed that walks a ball up and down a 24-foot-long ramp. Also on the bill will be Larry Bohanan and his puppet act.

An entry form is shown above and is due in the Recreation Office before December 14. Tickets are required for adults also.



Silky - the only Samoyed that walks a ball up and down a ramp 24 feet long - 9 feet high.

PGDP ends golf season

The 1979 PGDP golf season was wrapped up last month with a mixed scramble at Paducah's Paxton Park Golf Course. Capturing the year-end championship were Chuck Turok, John Hackney, Max Sacharnoski and Chan Hale, with a close win over the second place team, consisting of Marshall Jones, Manley Fortune, Gene Waggoner and Mary Andrews. Third place honor went to Bill Sacharnoski, Edith Clymer, J. Harbison and Sam Leone. all three teams brought in a score of five under par.

Next in line with a glowing four under par were Earl Richardson, C. J. Vickery, Tom Emerson and Norma Smith. Also shooting four under and placing fifth were Jerry Neale, Gene White, Steve Fenwick and Patti Turok.

Next issue. . .

The next issue will be dated
**November 29. The deadline is
November 19.**

Retirees planning December dance

Employees scheduled to retire December 31 will be the guests of honor at a party/dance planned for next month by the Oak Ridge Union Carbide Retirees Association. All Nuclear Division retirees are invited to attend the event, set for 8 p.m. Saturday, December 1, at the Oak Ridge Senior Citizens Center.

Ann and Don Matlock are dance chairmen. Other committee members include John and Helen Johnson, refreshments; Ruth Seyfried, decorations; and Justin Aylor, music.

about people. . .



Robert F. Hyland, Engineering Division at ORGDP, was recently awarded the Phillip T. Sprague Applications Award. The honor was announced at the Instrument Society of America awards luncheon in Chicago recently. He was cited for conception, development and application of hierarchical computer systems in the uranium enrichment processes.

Hyland worked with Western Electric Company, California Refining, and California Development Company before joining Union Carbide. He has served ISA as executive councilor, membership and education committee chairman, journal editor, vice president and president of the Oak Ridge section.

The Energy Advisor. . .

Editor's Note: Recently we began a series of energy conservation features which will be alternated with questions from readers to the "Energy Advisor" on conservation-related topics. The articles will be written by staff members about their own experiences or research, with ORNL's Merl Baker (alias the Energy Advisor) coordinating the series.

QUESTION: A small blower can be installed to maintain a positive air pressure inside a house. (See "The Energy Advisor," *Nuclear Division News*, November 1, 1979, for more information on air pressure and its effect on energy savings). What is the minimum positive pressure needed to significantly reduce infiltration? Will the energy required to heat the air supplied by the blower be significantly less than that required to heat the infiltrating air?

ANSWER: The air that the blower would bring into the house to keep it at a positive pressure would be from the outside. Thus, a blower alone would not save energy and could cause the house to have even higher infiltration rates, because air would be forced into the house. If the natural sources of infiltration in a house are sealed, a heat recuperator may be used to provide fresh air without adding much to the heating

bill. This device has been used in Sweden and Japan for several years and is just becoming commercially available in the United States.

QUESTION: Oak Ridge has a low average winter wind speed compared to that of nearby cities such as St. Louis, Louisville and Memphis. What is the difference in infiltration of the same house with an average wind speed of 5 mph compared to a speed of 15 mph?

ANSWER: To a first approximation, the air infiltration due to wind velocity is proportional to the wind velocity. Therefore, doubling the wind velocity could be expected to double the infiltration due to wind velocity. However, the total amount of air infiltration may not double, because it is dependent on both the temperature differential between inside and outside the house and the wind velocity.

question box. . .

(Continued from page 1)

The Nuclear Division is sincerely concerned with the health of its employees. It is requested that you report any observed release (gaseous or liquid) to your Plant/Laboratory Shift Superintendent.

Personal phone calls

QUESTION: Why are employees in some divisions allowed to make personal calls to Knoxville while those in other divisions are not?

ANSWER: Knoxville calls are to be made only in conducting official business or in situations where an individual is working late or an emergency situation arises.

Necessary personal calls to Knoxville may be made, provided the cost is billed to the employee's residence telephone number or personal credit card, or the call is

placed collect or from a pay telephone.

In any event, all calls should be limited to the minimum time necessary to fulfill the purpose.

With the installation of the new telephone system in Oak Ridge, all calls are traceable. Abuses in use of the telephone system throughout the Nuclear Division will be investigated and corrective action taken. We are attempting to administer this matter in a uniform way throughout the Division.

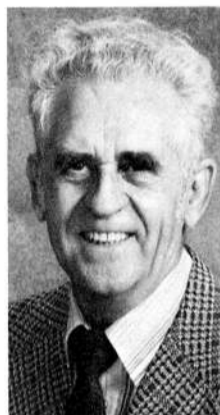
Dividend declared

The board of directors of Union Carbide have declared the company's 250th consecutive dividend. The amount is 75¢ a share on the outstanding capital stock, payable December 1 to stockholders of record on November 2.

The last quarterly dividend, paid on September 1, was also 75¢.

retirements. . .

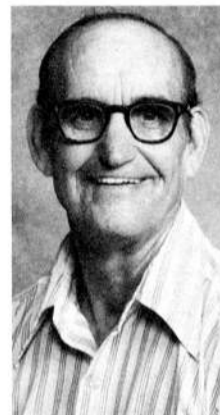
(Editor's Note: During the next couple of months there will be scores of Nuclear Division veterans retiring. Rather than attempt to get them in the last issue of the year, they are being spaced out. Many of those shown below will be leaving December 31.)



William E. Barker
Utilities
Y-12
32 years service



Fred T. Beaver Jr.
Graphite Shop
Y-12
21 years service



Cledith E. Davis
Building Services
Y-12
31 years service



Henry Devillez
Power, Utilities
& Chemicals
PGDP
28 years service



Buford L. Fain
Utilities
Y-12
28 years service



Fritz C. Fluri
Dispatching
Y-12
25 years service



Alice N. Fry
Physical Testing
Y-12
28 years service



Isaac V. Goins
Research Services
Y-12
28 years service



William T. Headrick
Research Services
Y-12
26 years service



Howard R. Olka
9215 Rolling Mill
Y-12
32 years service



Edward W. Pipes
Electric Engineering
Y-12
30 years service



Edgar Reagan
Dispatching
Y-12
30 years service



Howard W. Roberts
Tool Grinding
Y-12
23 years service



William P. Smith
Construction Engineering
Y-12
31 years service



Hennie T. Ward
Plant Laboratory
Y-12
34 years service

Division employees, retirees to be in art show



THESE NUCLEAR DIVISION ARTISTS are members of the Tennessee Artists' Association, which will present an exhibit at West Town Mall on November 16, 17 and 18. The exhibit will feature both oil and watercolor paintings, prints, drawings and photographs. Shown with some of their work are, from left, Florence Evans, retired, ORNL; Elsie Pickell, retired, ORNL; Bill Clark, ORNL; Paul Long, Y-12; Jean Bauman, Y-12; Fredrick Stapel, ORNL; and John Masters, retired, ORNL.

Lewis build own home

(Continued from page 1)

Living in a century-past environment seems to agree with the whole family. Rosie and Ginger identify with "Little House on the Prairie," and their parents have realized a long-time dream. Adjusting to a new lifestyle has gone well for the daughters, as they went from a school of 3,000 pupils to one with 300.

Building your own home is not easy, both Lewises admit, especially when you know absolutely nothing about constructing a house. "We both worked constantly," Carol says. "The articles we read didn't tell us that much."

Would they do it again? Indeed. They are now making plans for a bigger house and will use their present dwelling for a workshop. The new house will have one and one-half stories, complete with basement and attic. Self-sufficiency in energy is also in their future, as Rick plans a wind generator or some other independent means of obtaining electricity.



Carol and Rick Lewis in cabin



Supplies for winter



"The house is not a typical log cabin. . . the style they used is called a 'cordwood' house."

anniversaries. . .

Y-12 Plant

35 YEARS

J. P. Wheeler, Alpha 5 Processing; Hillman N. Wright, General Shops; Wilma C. Rodgers, Chemical Services; J. W. "Bill" Ebert Jr., Superintendents Division; Walter E. Gary, Engineering; and Phyllis C. Johnson, Computer Sciences Division.

30 YEARS

James F. Winfree, Materials Forming.

25 YEARS

Albert C. Seals and Earl A. Cruey.

20 YEARS

Joel H. Johnson, Gene P. Mattie, Darit K. Branson, Joseph O. Brummette Sr. and James R. Purch.

ORNDP

35 YEARS

Nathan C. Crutcher, Maintenance; Clarence R. Calloway, Operations; Woodrow Franklin, Maintenance; Broadus R. Webb, Shift Operations; Homer Jeffers, Maintenance; Joseph N. Kelley, Purchasing; and Vernon E. Davenport, Technical Services.

30 YEARS

Mason A. Butner Jr., Technical Services; and Ruby L. Jones, Maintenance.

25 YEARS

Billie McGregor and Ralph M. Moretz Jr.

20 YEARS

Roy L. Howell, James K. Bryson and Don H. Graves.

Paducah

20 YEARS

Billie E. Jones.

ORNL

35 YEARS

John T. Leslie, Plant and Equipment; Nette G. Crowe, Information; and Warren R. Grimes, Chemical Technology.

30 YEARS

William L. Hylton, Plant and Equipment.

25 YEARS

Eddie L. Evans, Homer D. Adkins and Charles W. Benson.

20 YEARS

Judd E. Kahn, Dorothy W. Gaddis and Victor C. Vaughn.



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